BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

RA 1ST AND FINAL BILL

Name of work: Improvements of Roads Drains and Culverts in Ward No. 10 (Doddabommasandra), Vidyaranyapura Sub Division.

Estimated Cost : Rs. 100.00 Lakhs

Head of Account : P-3798

Job Code: 010-21-000005

Name of Agency: Sri N.M Shivakumar, No. 07, 2nd Block, Juganahalli, Rajajunagara, Bangalore - 560010.

Work order No: BBMP/EE/BTP/WO/17/2020-21 D: 13-07-2021.

	Measurements Recarded on :										
Sl No	**Description**	**Unit**	**No.**	**L**	**B1**	**B2**	**Av.B**	**D**	**Qty**	**Rate**	**Amount**
1	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.										
		Cum									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 01 to 05 is =								**421.39**	243.00	**102398.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3)										
	#REF!	Sqm									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 06 to 09 is =								**939.15**	111.00	**104246.00**
3	Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 5km lead										
		Cum									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 10 to 11 is =								**538.80**		
	Qty upto 125%								**188.78**	56.00	**10571.00**
									350.03		
	Qty above 125%								**349.79**	59.01	**20641.00**
4	Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.										
		Cum									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 12 to 13 is =								**538.80**		
	Qty upto 125%								**188.78**	2001.00	**377739.00**
									350.03		
	Qty above 125%								**349.79**	2099.14	**734258.00**
5	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications.										
		Sqm									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 14 to 20 is =								**5454.00**		
	Qty upto 125%								**4707.44**	29.00	**136516.00**

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
									746.56		
	Qty above 125%								**743.51**	35.58	**26454.00**
6	Providing and laying **bituminous macadam** on prepared surface with crushed coarse aggregates as per design mix formula for base / binding course including loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant, transporting the mixd material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve the desired density, but excluding cost of primer / tack coat including lead, lift and cost of all materials, labour, HOM of machineries complete as per specifications. MORTH /Chapter 5 - using **40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 3.3 % VG-30 Bitumen**										
		Cum									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 21 to 27 is =								**272.00**		
	Qty upto 125%								**235.38**	5227.00	**1230305.00**
									36.63		
	Qty above 125%								**37.15**	7097.95	**263689.00**
7	Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications.										
	#REF!	Sqm									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 28 to 30 is =								**12437.40**	5.00	**62187.00**
8	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.										
		Sqm		Qty Vide Item No. 7					12437.40		
									12437.40	12.00	**149249.00**
9	Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - **using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen**										
	BEL EmployeeQuotiers	Cum									
	Interrior Road (W0354)		1	15.00	7.60	6.80	7.20	0.04	4.32		
			1	15.00	6.80	6.90	6.85	0.04	4.11		
			1	15.00	6.90	6.80	6.85	0.04	4.11		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.90	6.85	0.04	4.11		
			1	15.00	6.90	6.90	6.90	0.04	4.14		
			1	6.50	3.00	3.20	3.10	0.04	0.81		
			1	8.50	7.00	6.60	6.80	0.04	2.31		
			1	15.00	6.80	6.40	6.60	0.04	3.96		
			1	15.00	6.40	6.40	6.40	0.04	3.84		
			1	15.00	6.40	6.40	6.40	0.04	3.84		
			1	15.00	6.40	6.40	6.40	0.04	3.84		
			1	15.00	6.40	6.20	6.30	0.04	3.78		
			1	15.00	6.20	6.60	6.40	0.04	3.84		
			1	15.00	6.60	6.50	6.55	0.04	3.93		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			1	15.00	6.50	6.90	6.70	0.04	4.02		
			1	15.00	6.90	6.80	6.85	0.04	4.11		
			1	15.00	6.80	6.90	6.85	0.04	4.11		
			1	15.00	6.90	6.90	6.90	0.04	4.14		
			1	15.00	6.90	6.70	6.80	0.04	4.08		
			1	15.00	6.70	7.30	7.00	0.04	4.20		
			1	17.00	9.30	10.30	9.80	0.04	6.66		
	Cross Road 1 (W0413)										
			1	15.00	8.00	6.60	7.30	0.04	4.38		
			1	15.00	6.60	6.70	6.65	0.04	3.99		
			1	15.00	6.70	6.50	6.60	0.04	3.96		
			1	15.00	6.50	6.70	6.60	0.04	3.96		
			1	15.00	6.70	6.60	6.65	0.04	3.99		
			1	15.00	6.60	6.60	6.60	0.04	3.96		
			1	15.00	6.60	6.85	6.73	0.04	4.04		
			1	15.00	6.85	6.55	6.70	0.04	4.02		
			1	15.00	6.55	6.70	6.63	0.04	3.98		
			1	15.00	6.70	6.60	6.65	0.04	3.99		
			1	15.00	6.60	6.80	6.70	0.04	4.02		
			1	16.00	6.80	6.50	6.65	0.04	4.26		
	Cross Road 2 (W0417)										
			1	8.30	5.30	5.50	5.40	0.04	1.79		
			1	6.70	6.70	6.80	6.75	0.04	1.81		
			1	15.00	6.80	6.30	6.55	0.04	3.93		
			1	15.00	6.30	6.70	6.50	0.04	3.90		
			1	15.00	6.70	6.70	6.70	0.04	4.02		
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	15.00	6.70	6.70	6.70	0.04	4.02		
			1	15.00	6.70	6.70	6.70	0.04	4.02		
			1	7.00	6.70	10.10	8.40	0.04	2.35		
	Cross Road 3 (No Road ID)										
			1	15.00	9.10	6.70	7.90	0.04	4.74		
			1	15.00	6.70	6.70	6.70	0.04	4.02		
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.90	6.85	0.04	4.11		
			1	15.00	6.90	6.80	6.85	0.04	4.11		
			1	15.50	6.80	6.70	6.75	0.04	4.19		
	Main Road Cross Road 1 (W0352)										
			1	15.00	8.00	6.80	7.40	0.04	4.44		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.70	6.75	0.04	4.05		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	7.30	6.70	7.20	6.95	0.04	2.03		
	Main Road Cross Road 2 (W0350)										
			1	15.00	6.60	6.80	6.70	0.04	4.02		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	15.00	6.80	6.80	6.80	0.04	4.08		
			1	6.00	6.80	6.60	6.70	0.04	1.61		
	Main Road Cross Road 3 (W0348)										
			1	15.00	7.40	7.10	7.25	0.04	4.35		
			1	15.00	7.10	6.90	7.00	0.04	4.20		
			1	15.00	6.90	6.90	6.90	0.04	4.14		
			1	15.00	6.90	6.80	6.85	0.04	4.11		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	15.00	6.70	6.80	6.75	0.04	4.05		
			1	15.00	6.80	6.70	6.75	0.04	4.05		
			1	15.00	6.70	6.70	6.70	0.04	4.02		
	Main Road Cross Road 4 (W0346)										
			1	15.00	9.20	9.30	9.25	0.04	5.55		
			1	15.00	9.30	8.80	9.05	0.04	5.43		
			1	15.00	8.80	8.90	8.85	0.04	5.31		
			1	15.00	8.90	8.90	8.90	0.04	5.34		
			1	15.00	8.90	8.90	8.90	0.04	5.34		
			1	15.00	8.90	8.80	8.85	0.04	5.31		
			1	15.00	8.80	8.90	8.85	0.04	5.31		
			1	15.00	8.90	9.00	8.95	0.04	5.37		
			1	15.00	9.00	9.10	9.05	0.04	5.43		
	BEL Quotires inside 1st Road										
			1	15.00	4.20	3.70	3.95	0.04	2.37		
			1	15.00	3.70	3.60	3.65	0.04	2.19		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.70	3.65	0.04	2.19		
			1	15.00	3.70	3.60	3.65	0.04	2.19		
			1	15.00	3.60	3.50	3.55	0.04	2.13		
			1	15.00	3.50	3.60	3.55	0.04	2.13		
			1	15.00	3.60	3.20	3.40	0.04	2.04		
			1	15.00	3.20	3.60	3.40	0.04	2.04		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.80	3.70	0.04	2.22		
			1	15.00	3.80	3.60	3.70	0.04	2.22		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	15.00	3.60	3.60	3.60	0.04	2.16		
			1	5.20	3.60	3.60	3.60	0.04	0.75		
	Quoters Last Road										
			1	15.00	7.70	6.50	7.10	0.04	4.26		
			1	15.00	6.50	6.40	6.45	0.04	3.87		
			1	15.00	6.40	6.10	6.25	0.04	3.75		
			1	15.00	6.10	5.60	5.85	0.04	3.51		
			1	15.00	5.60	5.70	5.65	0.04	3.39		
			1	15.00	5.70	5.90	5.80	0.04	3.48		
			1	15.00	5.90	6.00	5.95	0.04	3.57		
			1	6.10	6.00	6.00	6.00	0.04	1.46		
	Quoters Last Road Cross 2										
			1	15.00	6.10	5.50	5.80	0.04	3.48		
			1	15.00	5.50	5.60	5.55	0.04	3.33		
			1	15.70	5.60	5.20	5.40	0.04	3.39		
			1	10.00	5.20	5.00	5.10	0.04	2.04		
	BEL Officers Quoters										
	Cross Road 2										
			1	7.20	12.60	6.20	9.40	0.04	2.71		
			1	15.00	5.40	5.00	5.20	0.04	3.12		
			1	15.00	5.00	4.90	4.95	0.04	2.97		
			1	15.00	4.90	4.50	4.70	0.04	2.82		
			1	15.00	4.50	4.70	4.60	0.04	2.76		
			1	15.00	4.70	4.60	4.65	0.04	2.79		
			1	15.00	4.60	4.60	4.60	0.04	2.76		
			1	15.00	4.60	4.60	4.60	0.04	2.76		
			1	15.00	4.60	4.60	4.60	0.04	2.76		
			1	15.00	4.60	4.50	4.55	0.04	2.73		
			1	15.00	4.50	4.50	4.50	0.04	2.70		
			1	15.00	4.50	4.60	4.55	0.04	2.73		
			1	10.00	4.60	5.40	5.00	0.04	2.00		
	Interior Road										
			1	15.00	6.00	4.60	5.30	0.04	3.18		
			1	15.00	4.60	4.60	4.60	0.04	2.76		
			1	15.00	4.60	4.50	4.55	0.04	2.73		
			1	17.00	4.50	5.00	4.75	0.04	3.23		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
	Cross Road 1										
			1	17.00	5.50	4.60	5.05	0.04	3.43		
									497.61		
									497.50	8000.00	**3980000.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
	Measurements Recarded on :										
10	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.										
	BEL Quoters Main Road (W0356)	Sqm									
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	4.00			0.10		0.80		
	BEL Quotiers interrior Road (W0354)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	6.50			0.10		1.30		
			2	8.50			0.10		1.70		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	17.00			0.10		3.40		
	Cross Road 1 (W0413)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
	Cross Road 2 (W0417)										
			2	8.30			0.10		1.66		
			2	6.70			0.10		1.34		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	7.00			0.10		1.40		
	Cross Road 3 (No Road ID)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.50			0.10		3.10		
	Main Road Cross Road 1 (W0352)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	7.30			0.10		1.46		
	Main Road Cross Road 2 (W0350)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	6.00			0.10		1.20		
	Main Road Cross Road 3 (W0348)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
	Main Road Cross Road 4 (W0346)										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
	Quoters Last Road Cross 2										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.70			0.10		3.14		
	Quoters Last Road Cross 1										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.70			0.10		3.14		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
									362.64		
									362.64	500.00	**181320.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
	Measurements Recarded on :										
11	Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.43cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.										
		Cum									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 31 is =								**7.74**	5647.00	**43708.00**
12	Tubular Steel Railing on Medium Weight Steel Channel (ISMC Series) 100 mm x 50mm:- Providing, fixing and erecting 50 mm dia steel pipe railing in 3 rows duly painted on medium weight steel channels (ISMC series) 100 mm x 50 mm, 1.2 metres high above ground, 2 m centre to centre, complete as per approved drawings as per specifications.										
			1	15.00					15.00		
			1	15.00					15.00		
			1	15.00					15.00		
			1	15.00					15.00		
			1	15.00					15.00		
			1	11.00					11.00		
									86.00	1511.00	**129946.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
	Measurements Recarded on :										
13	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications.										
		Sqm									
			1	15.00				1.80	27.00		
			1	15.00				1.80	27.00		
			1	15.00				1.80	27.00		
			1	15.00				1.80	27.00		
			1	15.00				1.80	27.00		
			1	11.00				1.80	19.80		
									154.80	84.00	**13003.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
	Measurements Recarded on :										
14	Providing and applying tack coat using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications										
		Sqm									
	Qty as per Pre-measurement Recorded vide E-Bill Page No. 32 to 33 is =								**5032.50**	15.50	**78004.00**
15	Providing and laying Bituminous Concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment , rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications.Clause 507 of MORTH V revision as per IRC SP-53-2015 - using 40-60 TPH capacity HMP with mechanical Paver, Gr-II (30-45mm) with 5.4 % of modified bitumen binder consisting of 4.97% VG- 30 bitumen (60/70 grade) 0.43% Plastomeric Thermoplastics (Waste plastic Additive).										
		Sqm									
	BEL Employee Quoters										
	Main Road (W0356)		1	15.00	10.70	8.80	9.75	0.04	5.85		
			1	15.00	8.80	8.70	8.75	0.04	5.25		
			1	15.00	8.70	8.80	8.75	0.04	5.25		
			1	15.00	8.80	8.80	8.80	0.04	5.28		
			1	15.00	8.80	8.70	8.75	0.04	5.25		
			1	15.00	8.80	8.80	8.80	0.04	5.28		
			1	15.00	8.70	8.80	8.75	0.04	5.25		
			1	15.00	8.80	8.80	8.80	0.04	5.28		
			1	15.00	8.80	8.50	8.65	0.04	5.19		
			1	15.00	8.50	8.50	8.50	0.04	5.10		
			1	15.00	8.50	9.00	8.75	0.04	5.25		
			1	15.00	9.00	8.95	8.98	0.04	5.39		
			1	15.00	8.95	8.60	8.78	0.04	5.27		
			1	15.00	8.60	8.20	8.40	0.04	5.04		
			1	15.00	8.20	9.20	8.70	0.04	5.22		
			1	15.00	9.20	9.00	9.10	0.04	5.46		
			1	15.00	9.00	9.10	9.05	0.04	5.43		
			1	15.00	9.10	9.10	9.10	0.04	5.46		
			1	15.00	9.10	9.20	9.15	0.04	5.49		
			1	15.00	9.20	8.90	9.05	0.04	5.43		
			1	15.00	8.90	9.00	8.95	0.04	5.37		
			1	15.00	9.00	9.10	9.05	0.04	5.43		
			1	15.00	9.10	9.15	9.13	0.04	5.48		
			1	15.00	9.15	9.20	9.18	0.04	5.51		
			1	15.00	9.20	9.60	9.40	0.04	5.64		
			1	15.00	9.60	8.80	9.20	0.04	5.52		
			1	15.00	8.80	8.80	8.80	0.04	5.28		
			1	15.00	8.80	9.00	8.90	0.04	5.34		
			1	4.00	9.00	9.80	9.40	0.04	1.50		
	BEL Officers Quoters										
	E-Stamp Office Road		1	4.00	14.00	7.00	10.50	0.04	1.68		
			1	15.00	5.60	5.40	5.50	0.04	3.30		
			1	15.00	5.40	5.40	5.40	0.04	3.24		
			1	15.00	5.40	5.40	5.40	0.04	3.24		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			1	15.00	5.40	6.30	5.85	0.04	3.51		
			1	15.00	6.30	5.80	6.05	0.04	3.63		
			1	15.00	5.80	5.40	5.60	0.04	3.36		
			1	15.00	5.40	5.40	5.40	0.04	3.24		
			1	15.00	5.40	5.40	5.40	0.04	3.24		
			1	15.00	5.40	5.40	5.40	0.04	3.24		
			1	9.70	5.40	5.40	5.40	0.04	2.10		
	From Gate										
			1	15.00	5.30	5.30	5.30	0.04	3.18		
			1	15.00	5.30	5.50	5.40	0.04	3.24		
			1	15.00	5.50	5.30	5.40	0.04	3.24		
			1	15.00	5.30	5.60	5.45	0.04	3.27		
			1	14.00	5.60	7.30	6.45	0.04	3.61		
									201.79		
									201.30	8000.00	**1610400.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
	Measurements Recarded on :										
16	Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications.										
		Sqm									
	BEL School Cross Road		2	4.00			0.10		0.80		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	9.70			0.10		1.94		
			2	7.20			0.10		1.44		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	10.00			0.10		2.00		
	Interior Road										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	17.00			0.10		3.40		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	10.00			0.10		2.00		
	BEL Quotires inside 1st Road										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		

Sl No	Description	Unit	No.	L	B1	B2	Av.B	D	Qty	Rate	Amount
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	5.20			0.10		1.04		
	Quoters Last Road										
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	15.00			0.10		3.00		
			2	6.10			0.10		1.22		
									184.84		
									183.00	500.00	**91500.00**
									Total		**9346134.00**
									Add GST @ 12%		**1121536.00**
									Grand Total		**10467670.00**

Assistant Engineer
Ward No. 10

Assistant Executive Engineer
Vidayranyapura Sub Division